



Weckesser

Effective May 1, 1965

NEW ADDRESS

4444 W. Irving Park Rd.

Chicago, Ill. 60641

Phone (312) 282-8626



MOLDED NYLON SCREWS and NUTS

MECHANICAL AND THERMAL PROPERTIES:

The nylon used in the manufacture of Weckesser Screws and Nuts is tough and has a sharp melting point below which it remains relatively rigid. General applications should be limited to service at temperatures below 300°F. (150°C.). When subjected to load, the service temperature should not exceed 275°F. (135°C.), and may go as low as -60°F. (-51°C.).

CHEMICAL RESISTANCE:

Weckesser nylon Screws and Nuts are made from the most solvent-resistant type of nylon. This nylon is insoluble in common solvents, alkalies, dilute mineral acids, and most organic acids. It is unaffected by petroleum oils and greases at temperatures as high as 300°F. (150°C.), and the lubricants are, in turn, unaffected by the nylon.

TABLE OF STANDARD SIZES

The following tables are based primarily on available thread sizes. Space does not permit a complete listing of Weckesser Molded Nylon Screws according to thread size, type of head *and* length. The Weckesser Company can supply from stock any of the Screws and Threaded Rod shown on the next page in a wide variety of lengths, suitable for almost any fastening requirement.

Weckesser Molded Nylon Screws and Nuts are molded to American Standard Thread Specifications, Class 2 Threads. Self-insulating and non-magnetic, they provide good torque strength, form-stability at high temperatures and abrasion resistance.

Military Specification: MIL-P-20693, Type 1.

WECKESSER COMPANY, INC. 4444 West Irving Park Road • Chicago, Illinois 60641

Phone: (312) 282-8626 • Teletype: 312-265-1322

Weckesser MOLDED NYLON SCREWS

ALL DIMENSIONS SHOWN IN INCHES

ROUND HEAD SCREWS



Catalog Number	Thread Size	D		A		H		J		T		O
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
N-172	1-72	.073		.138	.122	.061	.091	.025	.019	.043	.033	
N-256	2-56	.088		.162	.146	.067	.056	.031	.023	.048	.037	
N-440	4-40	.112		.211	.193	.086	.075	.039	.031	.058	.044	
N-632	6-32	.138		.260	.240	.103	.091	.048	.039	.068	.051	
N-832	8-32	.164		.309	.287	.120	.107	.054	.045	.077	.058	
N-1032	10-32	.190		.359	.334	.137	.123	.060	.050	.087	.065	
N-2520	1/4-20	.250		.472	.443	.175	.160	.075	.064	.109	.082	

FLAT HEAD SCREWS



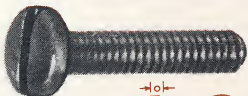
N-440	4-40	.112		.225	.207	.067	.055	.040	.031	.030	.022	
N-632	6-32	.138		.279	.257	.083	.069	.048	.039	.038	.029	
N-832	8-32	.164		.332	.308	.100	.084	.054	.045	.045	.035	
N-1032	10-32	.190		.385	.359	.116	.098	.060	.050	.053	.042	
N-2520	1/4-20	.250		.507	.477	.153	.131	.075	.064	.070	.056	

FILLISTER HEAD SCREWS



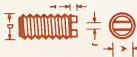
N-172	1-72	.073		.118	.104	.053	.045	.026	.019	.031	.020	.066
N-256	2-56	.086		.140	.124	.062	.053	.031	.023	.037	.025	.083
N-440	4-40	.112		.183	.166	.079	.069	.039	.031	.048	.034	.107
N-632	6-32	.138		.226	.208	.096	.086	.048	.039	.060	.043	.132
N-832	8-32	.164		.270	.250	.113	.102	.054	.045	.071	.052	.156
N-1032	10-32	.190		.313	.292	.130	.118	.060	.050	.083	.061	.180
N-2520	25-20	.250		.414	.389	.170	.155	.075	.064	.109	.087	.237

BINDER HEAD SCREWS



N-256	2-56	.086		.181	.171			.031	.023	.030	.022	.046
N-440	4-40	.112		.235	.223			.039	.031	.042	.032	.063
N-632	6-32	.138		.290	.275			.048	.039	.053	.043	.080
N-832	8-32	.164		.344	.326			.054	.045	.065	.053	.097
N-1032	10-32	.190		.399	.378			.060	.050	.077	.063	.114

SET SCREWS



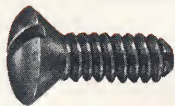
N-440	4-40	.112		.081	.073			.016	.011	.034	.029	
N-632	6-32	.138		.099	.091			.021	.017	.034	.029	
N-832	8-32	.164		.125	.114			.025	.021	.039	.035	
N-1032	10-32	.190		.151	.142			.029	.025	.046	.042	
N-2520	1/4-20	.250		.188	.176			.037	.033	.059	.054	

FLAT HEXAGONAL HEAD SCREWS



N-256	2-56	.086		.125	.120	.134						.045
N-440	4-40	.112		.1875	.181	.202						.054
N-632	6-32	.138		.250	.244	.272						.073
N-832	8-32	.164		.250	.244	.272						.113
N-1032	10-32	.190		.3125	.305	.340						.112
N-2520	1/4-20	.250		.375	.367	.409						.181

OVAL HEAD SCREWS



N-632	6-32	.138		.279	.257	.083	.069	.048	.039	.074	.060	.128
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Shorter lengths of all Weckesser screws and rods can be supplied at additional charge.

HOW TO ORDER

WECKESSER MOLDED NYLON SCREWS

Initial letter and number correspond to Weckesser catalog number; number or fraction following hyphen is actual screw length; style of head desired is written in as suffix.

For example: Order one-inch Flat Head Screws with 8-32 threads as follows: *N-832-1 Flat Head.*

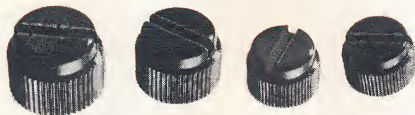
Catalog Number
N-440

Length
-1

Head Style
Round Head

Specify Color: Black or Natural

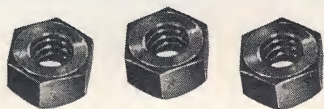
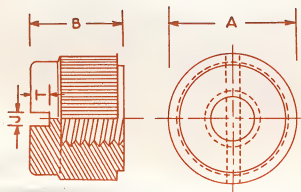
and NUTS



NYLON CAP NUTS

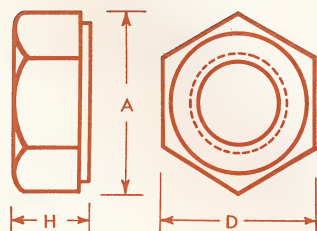
Weckesser molded nylon Cap Nuts are slotted and knurled. Ideal as insulated adjusting knobs; making longer screws when used with threaded nylon rod or decorative applications when used with removable panels. Available in black or natural.

Part No.	Thread Size	"A"	"B"	"J"	"T"
NC-440	4-40	.312	.212	.038	.044
NC-632	6-32	.343	.244	.043	.050
NC-832	8-32	.375	.276	.048	.058
NC-1032	10-32	.406	.312	.055	.067
NC-2520	1/4-20	.484	.397	.069	.087

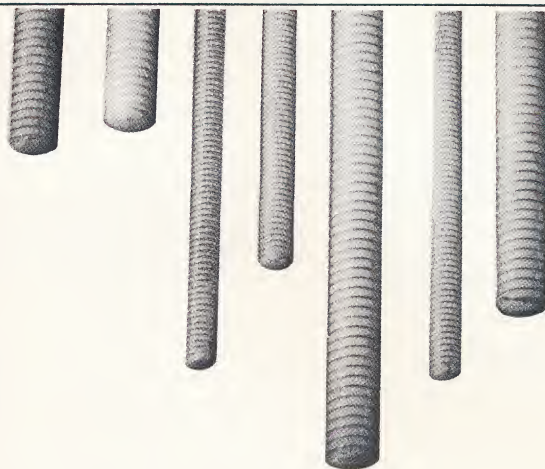


HEXAGONAL NUTS

Catalog Number	Thread Size	D		A		H	
		Max.	Min.	Max.	Min.	Max.	Min.
N-256-X	2-56	3/16	.180	.214	.208	.090	.086
N-440-X	4-40	1/4	.240	.279	.272	.124	.120
N-632-X	6-32	5/16	.300	.350	.343	.146	.138
N-832-X	8-32	11/32	.331	.386	.379	.170	.162
N-1024-X	10-24	3/8	.360	.420	.412	.196	.188
N-1032-X	10-32	3/8	.360	.420	.412	.196	.188
N-2520-X	1/4-20	7/16	.420	.441	.431	.258	.250



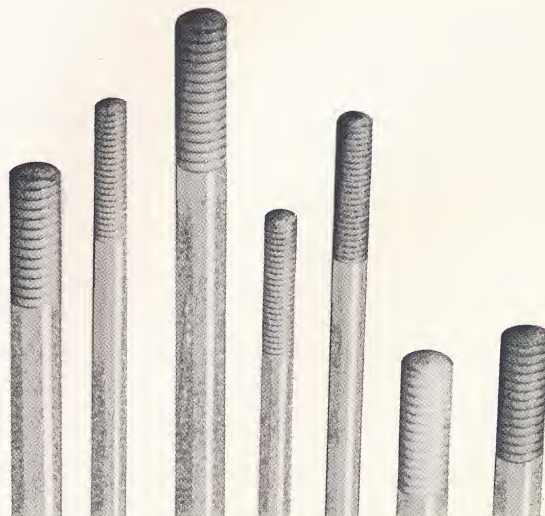
Available in black or natural.



THREADED NYLON ROD AND STUDS

Solid nylon rod, with continuous 6-32, 8-32, 10-32, and 1/4-20 American Standard Threads available from stock in one or two foot lengths. Studs with 3/4" of 4-40 threads at each end are also available from stock in 2 1/4", 3 1/2", and 4 1/2" lengths.

Useful for non-conducting spacers, random length screws when used with nylon cap nuts, U-bolt fasteners, etc.



PROPERTIES

OF NYLON USED IN WECKESSER SCREWS AND NUTS

PROPERTY	UNITS	METHOD	FM-10001	PROPERTY	UNITS	METHOD	FM-10001
Tensile strength, —70°F.	lb./sq. in.	D638—46T	15,700	Specific heat			0.4
73°F.	lb./sq. in.	D638—46T	10,900	Deformation under load, 122°F., 2,000 lb./sq. in.	%	D621—48T	1.4
170°F.	lb./sq. in.	D638—45T	7,600	Heat distortion temperature, 264 lb./sq. in.	°F.	D648—45T	150
Elongation, —70°F.	%	D638—46T	1.6	66 lb./sq. in.	°F.	D648—45T	360
73°F.	%	D638—46T	90	Dielectric strength, short-time	v/mil	D149—44	385
170°F.	%	D638—46T	320	step-by-step	v/mil	D149—44	340
Modulus of elasticity, 73°F.	lb./sq. in.	D638—46T	400,000	Volume resistivity	ohm-cm.	D257—46	4.5 x 10 ¹³
Shear strength	lb./sq. in.	D732—46	9,600	Dielectric constant, 60 cycles		D150—47T	4.1
Impact strength, Izod —40°F.	ft. lb./in.	D256—47T	0.4	10 ³ cycles		D150—47T	4.0
73°F.	ft. lb./in.	D256—47T	1.0	10 ⁶ cycles		D150—47T	3.4
Stiffness, 73°F.	lb./sq. in.	D747—48T	250,000	Power factor, 60 cycles		D150—47T	0.014
Flexural strength, 73°F.	lb./sq. in.	D790—45T	13,800	10 ³ cycles		D150—47T	0.02
Compressive stress at 1% deformation	lb./sq. in.	D695—44T	4,900	10 ⁶ cycles		D150—47T	0.04
Creep in flexure		(1)	90	Water absorption	%	D570—42	1.5
Hardness, Rockwell		D785—48T	R118	Flammability	in./min.	D635—44	self-extinguishing
Flow temperature	°F.	D569—48	480	Specific gravity		D792—48T	1.14
Coefficient of linear thermal expansion per °F.		D696—44	5.5 x 10 ⁻⁵				
Thermal conductivity	B.T.U./hr./sq. ft./°F./in.	(2)	1.7				

NOTES: Tests have been performed by A.S.T.M. methods unless otherwise indicated. Data shown are average values and should not be used for specifications. Many of these properties were determined on molded bars and are subject to variation, depending upon the molding conditions.

(1) Term "creep in flexure" is a measure of the deformation under a prolonged standard load. Results here represent mils deflection in 24 hrs. of a 1/8" x 1/2" bar, 4" span, center-loaded flatwise to 1,000 lb./sq. in. minus the initial deflection.

(2) Thermal conductivity measured by Cenco-Fitch apparatus.

TEST DATA

NYLON MACHINE SCREWS AND THREADED ROD

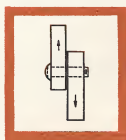


Fig. 1

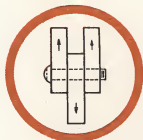


Fig. 2

Thread Size	TEST 1 Average Max. Tensile or Stripping Strength/Lbs.	TEST 2 Average Maximum Torque in Inch/Lbs.	TEST 3 Single Line Shear Average Max. Load/Lb. (Fig. 1)	TEST 4 Double Line Shear Average Max. Load/Lb. (Fig. 2)
1/4-20	150	9.50	200	400
10-32	125	6.25	150	275
8-32	85	4.06	40	140
6-32	50	3.15	15	50
4-40	30	2.10	10	20

TEST 5
Elongation test of 1/4-20 x 1" screw with 50 lb. load.
12 hrs. = .002"
24 hrs. = .004"
36 hrs. = .004"

TEST 6
Vibration—torque load test:
1/4-20 bolted through two 1/4" plates and torqued to 8.75 in./lbs. Test plates vibrated 24 hrs. Loss in torque 1.25 in./lbs. Re-torqued to 8.75 in./lbs., vibrated additional 24 hrs. with no further change in torque.

Weckesser

COMPANY, Inc.,

4444 West Irving Park Road • Chicago, Illinois 60641

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WECKESSER MOLDED NYLON SCREWS

PRICE LIST

PL 1103
Effective July 1964
Supersedes PL 1101

SCREWS PART NO.	Round Head	Fil. Head	Flat Head	Set Screw	Binder Head	Hex Head	Oval Head	PRICE PER THOUSAND - IN LOTS OF:					
								Less Than 500	500 To 999	1,000 To 4,999	5,000 To 24,999	25,000 To 49,999	50,000 And Over
N-172-9/64 N-172-1/4	x x	x x						\$14.45 14.45	\$13.81 13.81	\$13.19 13.19	\$12.56 12.56	\$11.94 11.94	\$11.30 11.30
N-256-1/8 N-256-3/16 N-256-1/4 N-256-5/16 N-256-1/2 N-256-5/8 N-256-1	x x x x x x x	x x x x x x x			x x x x x x x	x x x x x x x		14.35 14.35 14.35 14.35 14.35 14.45 14.71	13.72 13.72 13.72 13.72 13.72 13.81 14.06	13.11 13.11 13.11 13.11 13.11 13.19 13.43	12.48 12.48 12.48 12.48 12.48 12.56 12.79	11.86 11.86 11.86 11.86 11.86 11.94 12.15	11.23 11.23 11.23 11.23 11.23 11.30 11.51
N-440-3/16 N-440-1/4 N-440-1/2 N-440-5/8 B-440-3/4 N-440-1	x x x x x x	x x x x x x		x x x x x x	x x x x x x	x x x x x x		14.43 14.49 14.56 14.64 14.78 14.92	13.79 13.86 13.93 14.00 14.13 14.27	13.17 13.23 13.30 13.37 13.50 13.62	12.54 12.60 12.66 12.73 12.85 12.97	11.91 11.97 12.03 12.10 12.21 12.33	11.28 11.34 11.39 11.45 11.56 11.67
N-632-3/16 N-632-1/4 N-632-3/8 N-632-1/2 N-632-5/8 N-632-3/4 N-632-1	x x x x x x x	x x x x x x x		x x x x x x x	x x x x x x x	x x x x x x x	x	14.51 14.58 14.72 14.87 15.01 15.13 15.43	13.88 13.95 14.08 14.22 14.35 14.47 14.76	13.25 13.31 13.44 13.58 13.70 13.82 14.09	12.62 12.68 12.80 12.93 13.05 13.16 13.42	11.99 12.04 12.16 12.28 12.40 12.50 12.75	11.36 11.41 11.52 11.63 11.74 11.84 12.08
N-818-3/8					x			15.13	14.47	13.82	13.16	12.50	11.84
N-832-1/8 N-832-1/4 N-832-3/8 N-832-1/2 N-832-5/8 N-832-3/4 N-832-1 N-832-1-1/2	x x x x x x x x	x x x x x x x x		x x x x x x x x	x x x x x x x x	x x x x x x x x		14.80 14.95 15.13 15.34 15.56 15.78 16.18 17.10	14.16 14.30 14.47 14.67 14.88 15.09 15.47 16.35	13.51 13.65 13.82 14.01 14.21 14.41 14.77 15.61	12.87 13.00 13.16 13.34 13.53 13.72 14.07 14.87	12.23 12.35 12.50 12.67 12.85 13.03 13.37 14.13	11.58 11.70 11.84 12.00 11.74 12.35 12.66 13.38
N-1024-3/4 N-1024-1-1/2	x x	x x		x x	x x	x x		16.51 18.23	15.79 17.43	15.08 16.64	14.36 15.85	13.64 15.06	12.92 14.26
N-1032-1/4 N-1032-3/8 N-1032-1/2 N-1032-5/8 N-1032-1 N-1032-1-1/2	x x x x x x	x x x x x x		x x x x x x	x x x x x x	x x x x x x		15.47 15.65 15.93 16.63 17.04 18.22	14.80 14.97 15.24 15.52 16.28 17.43	14.13 14.29 14.55 14.81 15.56 16.64	13.46 13.61 13.86 14.11 14.82 15.85	12.79 12.93 13.17 13.40 14.08 15.06	12.11 12.24 12.47 12.70 13.34 14.26
N-2520-1/4 N-2520-1/2 N-2520-3/4 N-2520-1 N-2520-2	x x x x x	x x x x x		x x x x x		x x x x x		17.60 18.49 19.47 20.45 22.52	16.83 17.68 18.62 19.55 21.53	16.06 16.88 17.78 18.67 20.56	15.30 16.08 16.93 17.78 19.58	14.54 15.28 16.08 16.89 18.60	13.77 14.47 15.23 16.00 17.62

See other side for Studs, Hex and Cap Nuts, and Threaded Nylon Rod prices.

- Stock Sizes:** Above sizes from stock. When ordering, specify head style, as well as color: Black or Natural.
- Colors:** Normally stocked in Black or Natural. Other colors can be provided upon request. Add \$.75/M to base price; \$3.00 minimum coloring order). Color samples submitted for approval.
- Specials:** For shorter lengths not listed, add \$2.50/M cutting charge to price of next longer length shown plus \$5.00 net set-up charge for each diameter and length. Special sizes can be cut to length in any head variation EXCEPT THE SET SCREW. Screws cut to shorter lengths are furnished with a sheared end without chamfer. Samples are submitted for approval before order is processed. Special heads, lengths and threads can be furnished on special order.
- Terms:** Invoices dated 1st-15th, 1% if paid by 25th. Invoices dated 16th-31st, 1% if paid by 10th. Otherwise 30 days net, F.O.B. shipping point.
- Minimum Billing:** \$5.00 net excluding set-up charges. Various sizes of screws, studs, hex and cap nuts maybe accumulated to obtain larger quantity discounts. Items ordered on minimum billing or cut to special length may not be returned for credit.
- Freight Allowance:** Transportation charges allowed on net billings of \$50.00 or more only on shipper's choice of carrier. No discount allowed on transportation, sales tax or similar charges.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Weckesser COMPANY, Inc. 5701 Northwest Highway - Chicago, Illinois 60646

Teletype 312-265-1322

Telephone: 763-6688

Area Code: 312



HEX AND CAP NUTS PRICE LIST

		PRICE PER THOUSAND IN LOTS OF:					
PART NO.	THREAD SIZE	LESS THAN 500	500 TO 999	1,000 TO 4,999	5,000 TO 24,999	25,000 TO 49,999	50,000 AND OVER
NUTS - HEX							
N-256-X	2-56	\$23.63	\$22.61	\$21.58	\$20.55	\$19.52	\$18.50
N-440-X	4-40	23.86	22.83	21.79	20.75	19.71	18.68
N-632-X	6-32	24.48	23.42	22.35	21.29	20.23	19.16
N-832-X	8-32	24.84	23.76	22.68	21.60	20.52	19.44
N-1024-X	10-24	25.21	24.11	23.02	21.92	20.82	19.73
N-1032-X	10-32	25.21	24.11	23.02	21.92	20.82	19.73
N-2520-X	1/4-20	26.55	25.40	24.24	23.09	21.94	20.78
NUTS - CAP							
NC-440	4-40	23.74	22.70	21.67	20.64	19.61	18.58
NC-632	6-32	24.12	23.07	22.02	20.97	19.92	18.87
NC-832	8-32	24.98	23.89	22.81	21.72	20.63	19.55
NC-1032	10-32	25.83	24.71	23.58	22.46	21.34	20.21
NC-2520	1/4-20	26.68	25.52	24.36	23.20	22.04	20.88

Specify color: Black or Natural

THREADED NYLON STUDS

		PRICE PER THOUSAND IN LOTS OF:					
PART NO	THREAD	LESS THAN 500	500 TO 999	1,000 TO 4,999	5,000 TO 24,999	25,000 TO 49,999	50,000 AND OVER
NS-440-2-1/4	4-40	\$19.69	\$18.83	\$17.98	\$17.12	\$16.26	\$15.41
NS-440-3-1/2	4-40	23.10	22.10	21.09	20.09	19.09	18.08
NS-440-4-1/2	4-40	25.81	24.68	23.56	22.44	21.32	20.20

Molded in lengths shown with 3/4" of thread at each end. Specify Color: Black or Natural.

THREADED NYLON ROD

		PRICE PER FOOT OF A SIZE:					
PART NO.	THREAD SIZE	1 TO 19	20 TO 99	100 TO 299	300 TO 499	500 TO 999	
NRTA-632	6-32	\$.53	\$.48	\$.44	\$.40	\$.35	
NRTA-832	8-32	.58	.53	.48	.43	.38	
NRTA-1032	10-32	.64	.58	.53	.48	.42	
NRTA-2520	1/4-20	.73	.67	.61	.55	.49	

Solid Nylon - Continuous American Standard Threads. Shipped from stock in one & two ft. lengths. Specify lengths. Longer lengths up to 7-1/2 feet can be furnished on request. Natural color only.

		PRICE PER 1,000 PIECES CUT TO REQUIRED LENGTH:					
THREAD SIZE		1"	2"	3"	4"	5"	6"
6-32		\$38.34	\$74.63	\$111.31	\$147.61	\$186.55	\$222.71
8-32		41.92	81.78	122.05	161.91	204.45	244.31
10-32		45.90	89.74	133.99	177.83	224.35	268.19
1/4-20		52.56	103.06	153.97	204.47	255.59	306.09

Can also be furnished in pieces cut specified lengths for use as studs, pressure regulating contacts, U-bolts, etc.

NYLON ROD PRICES PER M PIECES IN LOTS OF	100 - 499	+ 20%	10,000 - 24,999	- 10%
	500 - 999	+ 10%	25,000 - 49,999	- 15%
	1,000 - 4,999	List Price	50,000 - 99,999	- 20%
	5,000 - 9,999	- 5%	100,000 & Over	- 25%

Stock Sizes: Above sizes from stock. When ordering, specify head style, as well as color: Black or Natural.
Colors: Normally stocked in Black or Natural.. Other colors can be provided upon request. Add \$.75/M to base price; (\$3.00 minimum coloring order). Color samples submitted for approval.

Specials: For shorter lengths not listed, add \$2.50/M cutting charge to price of next longer length shown plus \$5.00 net set-up charge for each diameter and length. Special sizes can be cut to length in any head variation EXCEPT THE SET SCREW. Screws cut to shorter lengths are furnished with a sheared end without chamfer. Samples are submitted for approval before order is processed. Special heads, lengths and threads can be furnished on special order.

Terms: Invoices dated 1st-15th, 1% if paid by 25th. Invoices dated 16th-31st, 1% if paid by 10th. Otherwise 30 days net, F.O.B. shipping point.

Minimum Billing: \$5.00 net excluding set-up charges. Various sizes of screws, studs, hex and cap nuts maybe accumulated to obtain larger quantity discounts. Items ordered on minimum billing or cut to special length may not be returned for credit.

Freight Allowance: Transportation charges allowed on net billings of \$50.00 or more only on shipper's choice of carrier. . No discount allowed on transportation, sales tax or similar charges.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.